

## ABSTRACT

The major components are a primary winding 12  
5 connected to a high-voltage, a large-current power supply 1,  
a secondary winding 14 connected to an electromagnetic  
forming coil 2, and a magnetic core 16 for guiding the  
magnetic flux produced by the primary winding. The  
magnetic core 16 is composed of a primary core 16a on which  
10 the primary winding is wound and a secondary core 16b on  
which the secondary winding is wound. The primary core and  
the secondary core are magnetically connected together by  
putting them in contact or in close proximity. And the  
primary core and the secondary core are separated each  
15 other when the connector is disconnected. Thus, current  
pulses at a high voltage (for instance, 10 kV) with a large  
current (for example, 100 kA or more) and a narrow pulse  
width (e.g., 30  $\mu$ sec or less) can be efficiently  
transmitted, and the connector can be easily attached and  
20 removed.